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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|-------------------------|---------------------|------------------|
| 10/597,012   | 07/06/2006  | Christopher M. Schnabel | FIS920030250US1     | 4724             |
| 33074 7590 06/15/2009<br>INTERNATIONAL BUSINESS MACHINES CORPORATION<br>DEPT. 18G<br>BLDG. 321-482<br>2070 ROUTE 52<br>HOPEWELL JUNCTION, NY 12533 |             |                         |                     |                  |
| EXAMINER   |             |                         |                     |                  |
| TRINH, MINH N  |             |                         |                     |                  |
| ART UNIT   |             | PAPER NUMBER            |                     |                  |
| 3729   |             |                         |                     |                  |
| NOTIFICATION DATE  |             | DELIVERY MODE           |                     |                  |
| 06/15/2009   |             | ELECTRONIC              |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

EFIPLAW@US.IBM.COM

### Office Action Summary

**Application No.**

10/597,012

**Applicant(s)**

SCHNABEL ET AL.

**Examiner**

Minh Trinh

**Art Unit**

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 19-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE-08)  
Paper No(s)/Mail Date 7/6/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election with traverse of Group I (claims 1-18) in the reply filed on 4/8/09 is acknowledged. The traversal is on the ground(s) that the examiner has not established a prima facie case of serious burden of examination of the inventions of Groups I and II together. This is not found persuasive because the inventions of Group I and II each have a separate status in the art and clearly have a separate field of search, and the search required for Group I is not required for Group II. Moreover, these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper. In accordance with MPEP §803, the examiner has demonstrated that the inventions of Group I and II are each independent or distinct as claimed and a serious burden would be placed on the examiner as discussed above. Further, the recitation of "at least one" in group I do not require two or more as in Group II, also the invention II has different mode of operations and function such as where the alignment means for stacking said carriers, etc., for above reasons, the requirement is still deemed proper and is therefore made **FINAL**. Thus, claims of group II, i.e., 18-23 are held to be nonelected and withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 4/8/09.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caccoma et al (4342090).

Caccoma et al teach the chip mounting system having at least one carrier 15 integrally holding a plurality of parts (24 A-C), an assembly area 13 having cavity provided with alignment means and a transport 37 for moving the at least one carrier (see Fig. 1, depicts a carrier 15, having means for alignment 35, 36 and a transport 37

for moving the carrier 15). Note that reference 15 is as broadly readable as the at least one carrier of the application.

As applied to claim 14 Caccoma's Fig. 1, shows the carriers and transport means being controlled by driving means 35 and 36.

4. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caccoma et al in view of Arakawa et al (5822847).

Caccoma et al do not teach the cavity being provided with a plurality of post to guide the carriers containing the parts into place within the cavity as that as recited in claims 3-5. Arakawa et al teach the above structural features (see Figs. 3-4, and the discussed at col. 5, lines 54-60). Therefore, it would have been obvious to one ordinary having skill in the art at the time the invention was made to employ the Arakawa 's teachings as described above into the system invention of Caccoma et al in order to obtain a desired structure by using the available techniques.

5. Claims 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caccoma et al in view in view of Galli (3724068).

Caccomas et al do not teach the limitations of claims 6-13 i.e., mechanical tab, and the remove by etching, mechanical destruction by current and laser ablation or the like. Galli teaches the use of mechanical tab (see Figs. 2-3, and the discussion at col. 2, line 45-68), further, Galli inherent discloses the removing of the tab, by etching and by means of ablation. Therefore, it would have been obvious to one ordinary having

skill in the art at the time the invention was made to employ the Galli 's teachings as described above into the system invention of Caccoma et al in order to form a desired structure having mechanical tab and the removing by etching and ablation associated therefrom.

6. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caccoma et al in view of Koibuchi (4908092).

Caccoma et al do not teach the system where the driving means comprise comb drives coupled to gears. Koibuchi teaches the structural features including comb drives and gears (see Fig. 17, and the discussed at col. 13, lines 45-57). Therefore, it would have been obvious to one ordinary having skill in the art at the time the invention was made to employ the Koibuchi's teachings as described above into the system invention of Caccoma et al as so to form a desired structure including that as described above (i.e., comb drives coupled to gears).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (571) 272-4569. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Minh Trinh/  
Primary Examiner, Art Unit 3729

mt  
6/8/09

